# TYNDALL AFB OPEN HOUSE / AIRSHOW





Page 2 March 21, 2003

# Team Tyndall welcomes all to Gulf Coast Salute 2003

BRIG. GEN. LARRY NEW

325th Fighter Wing commander

This weekend is the Gulf Coast Salute open house and air show! This year's event celebrates 100 years of powered flight and the next generation of air dominance. Almost 100 years ago on the coast of North Carolina, Orville and Wilbur Wright could never have thought their creation would one day evolve into a technological marvel that transcends the boundaries of imagination.

We've come a long way since the Wright brothers.

As of late this summer, Tyndall Air Force Base along with Bay County will usher in a new era in aviation history and air dominance as we welcome the F/A-22 Raptor. While we eagerly anticipate the arrival of the F/A-22 Raptor, we continue to train the world's best air superiority team, those who are charged with protecting American interests around the globe. It is a responsibility we take very seriously and it requires a total team effort - ac-

tive duty, Guard, Reserve, civilians and our community friends - to accomplish.

For years, Tyndall has enjoyed a



strong friendship with Bay County and its surrounding communities, one that grows stronger with each passing year. Without the friendship and support of our local community and our families, the men and women of Tyndall AFB would be hard-pressed to accomplish the mission.

The Gulf Coast Salute serves as an op-

portunity to educate and tell the Air Force story to family, friends and the American public. It's an opportunity we

strong friendship with
Bay County and its surrounding communities,
one that grows stronger with each passing
year. Without the
look forward to each year as it provides
our guests with a first-hand look at the
Department of Defense aircraft and
equipment as well as the chance to interact with our most valuable asset –
our people.

As our nation wages a war on terrorism and conducts operations on several fronts, it is important the public understands what our armed forces bring to the fight. The support of the public and military families is critical to our mission success.

This year's open house features military and civilian aerial performances, highlighted by the U.S. Air Force Thunderbirds, as well as numerous air-

•SEE AIR SHOW PAGE 11

# The American Flag

MASTER SGT. KENNETH FIDLER

U.S. Air Forces in Europe public affairs

Lying on my cot, I stared blurrily through the mosquito netting. It was just after midnight Jan. 17, 1991, and my tentmates and I were restless with the feeling something was going to happen. We had been deployed to the Middle East country of Qatar since the end of August 1990 in support of Desert Shield, which, little did we know, was about to turn into Desert Storm.

A 4-by-6-inch souvenir American flag was tacked to the MRE boxes I used as drawers. It just hung there, small but majestic in all that it stood and still stands for, its simple colors hiding deep, complex meanings. I stared at it thinking that I never really knew what that flag stood for. We all know the core meanings — duty, honor, country. But something that happened later that day made me think otherwise, something that showed me the fabric of the flag is more than just devotion — it's a symbol of faith and belief.

I had dozed off just before the sirens

wailed. The war had begun for the 401st Tactical

Fighter Wing. Our pilots had been up for quite a while going over the latest intelligence reports, planning their missions and just trying to let their general state of nervousness ebb. It was obvious what we had to do; after all, we had spent years training for it

I grabbed the flag and tucked it into my pocket. As I ran out through the door flap, I stumbled into a small group of restless airmen standing around our sandbag-fortified bunker listening to the radio as President George Bush gave his speech to the world that Desert Storm had begun. F-117 stealth fighters had just unloaded their bombs on Baghdad. One person exclaimed, "Oh, man, they really did it! Let's go get 'em!"

The flightline buzzed with activity as the sun spread its wake-up call over the desert. I raced out with my camera and notepad, trying to capture the most important moment in the wing's history. Standing underneath the wing of an F-16, I watched as crew chiefs, looking grim yet excited, readied their jets for combat missions that changed the

course of history.

That was when emotions washed over me. Crew chiefs poised at parade rest as their pilots warmed up their jets to high-pitched whines. They pulled out from their parking spaces and taxied to the end of the runway. In groups of two, they streaked into the sky as glowing afterburners kicked them north toward Iraq.

"My feelings intensified when I saw those jets go," said our commander, Col. Jerry Nelson. One crew chief, Staff Sgt. Charles Stuart, said, "I just told my pilot, 'I'll see you when you get back." But I could tell in his eyes he wasn't sure if that was going to happen.

Watching those jets silhouetted against the sun brought tears to many eyes on the flightline. It was a proud moment for everyone. One crew chief stood silently still; his chest swelled as he held a solid salute until the afterburners winked out. I heard him mumble, "Praise to God that they come back."

A few hours later, the same crowd that watched the takeoff witnessed the second greatest moment in the wing's history—all the F-16s landed Code 1, in perfect condi-

tion, their weapons loads expended. As everyone cheered the pilots as they taxied to park, a maintenance truck drove past with a sign in the window: Coalition 2, Iraq 0. That meant coalition forces had shot down two enemy jets. Iraq's air forces didn't touch us. A cheer erupted.

After his first combat mission, Maj. Dick Shulte said, "I'd be a liar if I said I wasn't nervous, but there's so much to do and so much for us to listen for, you're too busy to be that nervous."

But one pilot wasn't too busy to stop and reflect on what he had just done. He looked back at the row of parked F-16s as maintenance crews busily readied them for their next missions.

He reached into his pocket and pulled out an American flag he had carried with him on his mission, the same size as the one I had with me. It was carefully folded, and he just stared at it for a moment.

He pressed the flag against his forehead and his lips moved as if he were reciting a prayer. He turned to head back to the operations trailer. He walked by, pressed the flag into my hand and said, "Keep the faith, man. Just keep the faith."

#### **Editorial Staff**

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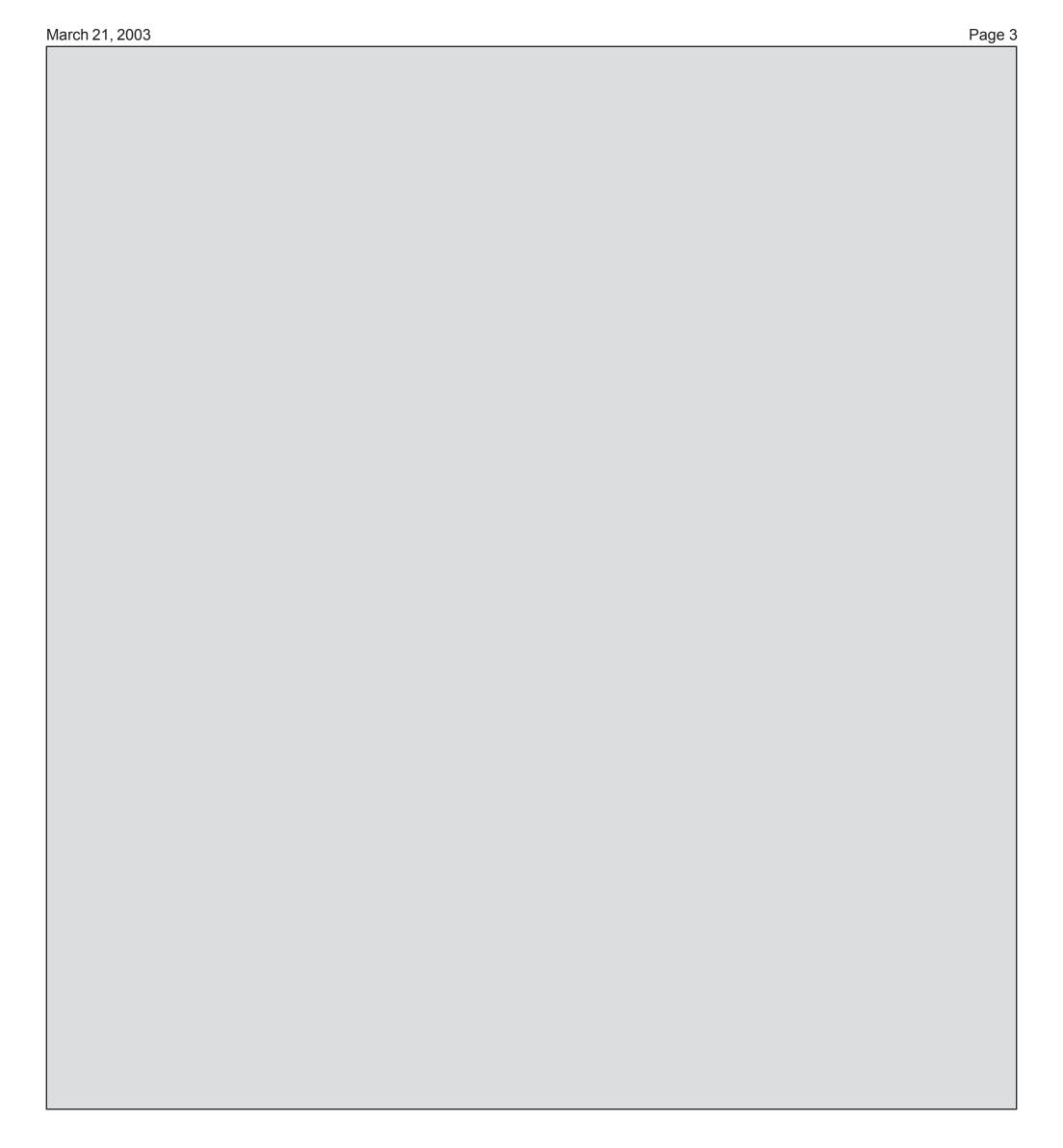
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For more information, or to advertise in the newspaper, call (850) 747-5000.



Page 4 March 21, 2003

# LOST?

If you become separated from your party during the air show, you can meet them at the designated meeting area located between Hangars 3 and 4.

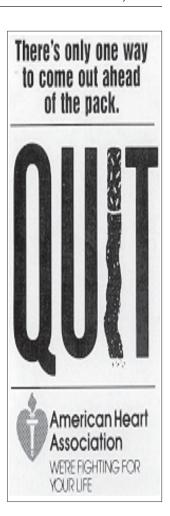




#### Courtesy photo

#### The need for speed

Neal Darnell's Flash Fire jet-powered funny truck is the "world's fastest 1/4 mile Chevy S-10 Pickup," boasting a Pratt & Whitney J-34-48 jet engine that provides 12,000 horsepower and 7,000 pounds of thrust with after-burner. The truck has a speed range of 250-260 mph. Mr. Darnell will "pilot" his machine at this year's Gulf Coast Salute.



Meet your military

During your visit to Tyndall AFB and throughout the Gulf Coast Salute, you will notice military members in uniform. Feel free to approach them with questions or comments.

# Thunderbirds to fill Tyndall skies

#### Air Force's flight demonstration squadron headlines Gulf Coast Salute

The U.S. Air Force Air Demonstration Squadron, "Thunderbirds," perform precision aerial maneuvers to exhibit the capabilities of modern high-performance aircraft to people throughout the world. The squadron exhibits the professional qualities of Air Force people who fly, maintain and support these aircraft.

The Thunderbirds squadron is an Air Combat Command unit comprised of eight pilots (six are demonstration pilots), four support officers, four civilians, 115 active-duty enlisted people and two National Guardsmen performing in more than 27 different career fields. The squadron is charged with supporting U.S. Air Force recruiting and retention programs, to reinforce public confidence in the Air Force and demonstrate, to the public,

the professional competence of Air Force personnel, strengthening morale and esprit de corps among Air Force personnel, supporting Air Force community relations programs and people-to-people programs and representing the United States and its armed forces to foreign nations and projecting international goodwill.

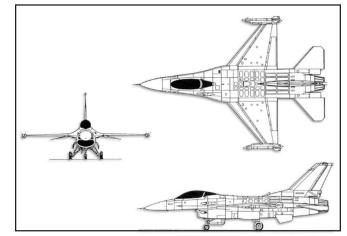
A Thunderbirds' air demonstration is a mix of six aircraft, performing formation flying and solo routines. The four-aircraft diamond formation demonstrates the training and precision of Air Force pilots, while the solos highlight the maximum capabilities of the Lockheed Martin F-16 Fighting Falcon. The pilots perform approximately 30 maneuvers in a demonstration. The entire show, including ground and air, runs about an hour and 15 minutes. The

demonstration season lasts from March to November, with the winter months used for training new pilots.

Officers serve a two-year assignment with the squadron, while the enlisted corps serves three to four years. Nearly a third of all personnel are replaced each year, providing a constant mix of experience levels.

The squadron performs no more than 88 air demonstrations each year and has never canceled a performance due to maintenance difficulty. Since the unit's inception in 1953, more than 315 million people in all 50 states and 60 foreign countries have witnessed the red, white and blue jets in more than 3,500 official aerial demonstrations

(Courtesy U.S. Air Force Aerial Demonstration Team)



#### F-16 Facts and Figures

**Primary Function:** Multi-role fighter **Builder:** Lockheed Martin Corp.

**Power Plant:** F-16C/D: one Pratt & Whitney F100-PW-200/220/229 or General Electric F110-GE-

100/129

**Thrust:** F-16C/D, 27,000 pounds

Length: 49 feet, 5 inches

Height: 16 feet

Wingspan: 32 feet, 8 inches

Speed: 1,500 mph (Mach 2 at altitude)

Ceiling: Above 50,000 feet

Maximum Takeoff Weight: 37,500 pounds Range: More than 2,000 miles ferry range Armament: One M-61A1 20mm multibarrel

cannon with 500 rounds; external stations can carry up to six air-to-air missiles, conventional air-to-air and air-to-surface munitions and electronic

countermeasure pods.

**Crew:** F-16C: one; F-16D: one or two **Date Deployed:** January 1979

**Inventory:** Active force, 444; Air National Guard, 305; Posonio, 60

305; Reserve, 60.

#### Thunderbird Modifications

- Dogfight switch rewired to accommodate smoke oil on/off switch
- Smoke oil safe switch added to right console
- Smoke oil plumbing
- Ammunition drum and cannon removed to accommodate smoke oil drum

# Air Force aerial demo team rich in history

In 1947, while the jet age was still in its infancy, military aviation was hurtled into the future with the creation of the U.S. Air Force as a separate service. Just six years later, on May 25, 1953, the Air Force's official air demonstration team, designated the 3600th Air Demonstration Unit, was activated at Luke Air Force Base, Ariz.

The name "Thunderbirds" was soon adopted by the unit; influenced in part by the strong Native American culture and folklore of the southwestern United States where Luke is located. Native American legend speaks of the Thunderbird with great fear and respect. To some, it was a giant eagle ... others envisioned a hawk. When it took to the skies, the earth trembled from the thunder of its great wings. From its eyes, shot bolts of lightning. Nothing in nature could challenge the bird of thunder, the story said, and no man could stand against its might. The story of the Thunderbird was repeated across the generations, until at last, it assumed the immortality of legend. A more appropriate name couldn't have been selected, as it is with the same commanding presence the Thunderbirds took to the skies.

The first aircraft selected for the new demonstration team was the F-84G "Thunderjet." Its straight-wing configuration was considered well-suited for aerobatic maneuvers, and although the aircraft could not exceed the speed of sound, like some military aircraft, it easily met the needs of a demonstration aircraft.

Mindful of their mission to show the Air Force's best aircraft, the team selected the swept-wing F-84F "Thunderstreak" as their second aircraft in 1955. The Thunderstreak was modified for the team by adding smoke tanks for the first time, and red, white and blue drag chutes.

In 1956, the Thunderbirds became the world's first supersonic aerial demonstration team when they transitioned from the F-84F to the F-100 "Super Sabre." That same year, the Thunderbirds moved to Nellis Air Force Base, Nev., simplifying logistics and maintenance for the aircraft.

In the spring of 1969, the Thunderbirds continued show-casing America's premier fighter aircraft as the team received the first of the new McDonnell Douglas F-4E "Phantom IIs" and began the team's conversion. The F-4 was immense compared with its predecessors. It was big. It was heavy. It was powerful. With the earth-shaking roar of eight J-79s from the four diamond aircraft, no demonstration aircraft accomplished the mission of representing American airpower more impressively than the Phantom.

It was 1974 and a fuel crisis resulted a new aircraft for the team - the sleek, swift and highly maneuverable Northrop T-38A "Talon," the Air Force's first supersonic trainer. Economically, the T-38 was unmatched. Five T-38s used the same amount of fuel needed for one F-4 Phantom, and fewer people and less equipment were required to maintain the aircraft.

Although the Talon did not fulfill the Thunderbird tradition of flying front-line jet fighters, it did meet the criteria of demonstrating the capabilities of a prominent Air Force aircraft. The T-38A was used throughout the Air Force during this time period in a variety of roles because of its design, economy of operation, ease of maintenance, high performance and exceptional safety record. In fact, Air Force fighter pilots still use this aircraft during undergraduate pilot training today.

(Courtesy U.S. Air Force Aerial Demonstration Team)



Page 6 March 21, 2003

### Thunderbird returns home, exhibits America's air power

SENIOR MASTER SGT. ROB FULLER is a dream come true. 325th Fighter Wing public affairs

It was 1960-something. A young boy sat on his father's shoulders, on a flightline, at a base tucked away in a small Florida panhandle town. He waited anxiously, not knowing whether to cover his ears or keep them perked for the first signs that they were coming.

He knew they would blast across the sky, the Phantom jets filling the Gulf Coast sky with a roar that would rumble in his chest ... he wasn't disappointed and he would have easily given anything to fly like a Thunderbird.

Fast forward. It's 2003 and a seasoned Air Force pilot sits in the cockpit of a machine generating 30,000 pounds of thrust and feared worldwide. Feeling the thunder, knowing he commands the bird, his jet screams over a base in a small Florida panhandle town. Looking at the flightline shrinking over his shoulder, he remembers another time and thinks about the boy on his father's shoulders.

For Lt. Col. Richard McSpadden, USAF Thunderbird Demonstration Team leader and commander, it

"Richard loved airplanes as a child," said Dr. Bob McSpadden, Gulf Coast Community College President and Colonel McSpadden's uncle. "He watched the Thunderbirds perform at Tyndall in the 1960s and it was clear that he wanted to fly with them—that's what he wanted to do."

Born and raised in Panama City, Colonel McSpadden attended elementary school here, but eventually moved away.

"Although I moved around with my folks, I always called Panama City my hometown," Colonel McSpadden said. Not only does he call it home,

he proudly 'shouts' it by the bright embroidery on his Thunderbird Team travel bag; a traditional way of recognizing where team members hail from.

Colonel McSpadden eventually returned to the area and after attending Gulf Coast Community College, graduated from the University of Georgia and was commissioned through the university's Reserve Officer Training Corps program. Flight training took the officer to a



Lt. Col. Richard McSpadden, a Panama City native, returns this week as commander of the U.S. Air **Force Aerial Demonstration Team.** 

couple of bases for Undergraduate Pilot Training and culminated with learning to fly the F-15 Eagle at Tyndall.

"My career pretty much echoes a typical F-15 pilot's," said Colonel McSpadden. "After graduating and learning to fly the airplane, I was assigned to Kadena Air Base, Japan. From there I went to Holloman Air Force Base, N.M."

Following the Holloman assignment, Colonel unique turn.

"When I was a captain, I was selected to be an air attaché in the Philippines, flying C-12s," the colonel said. The C-12 is a twinengine turboprop aircraft used to carry passengers and cargo between military installations.

"That was a fascinating assignment," Colonel McSpadden said. "You can do so many fascinating things while wearing this uniform, and that was completely off the track from what an F-15 pilot would normally do. I got a real education about life in the thirdworld, our international mis-

sions, working with embassies and representing our Air Force."

When he re-entered the F-15 world, Colonel McSpadden transferred to Langley AFB, Va. and later came home to Panama City and Tyndall AFB. He was assigned to Tyndall in the 1st Fighter Squadron when applied for Thunderbirds; it came down to three candidates. One day, the wing commander called Colo-

McSpadden's career took a nel McSpadden to his office.

"He said, 'Spad, we have a problem," said Colonel McSpadden, who at the time was the operations officer in the 1st FS. "The general said, 'we're going to have to find a new operations officer in the 1st FS,' right then I wondered, is this how you're told you're fired?"

"Being selected for the Thunderbirds in a highly competitive process says so much Richard," about McSpadden said. "Being selected as commander of this prestigious group says even more."

Of course the colonel was fired — "fired up" to be the new Thunderbird commander.

"I was elated," Colonel McSpadden said. "It's been everything I thought it would be."

"It's truly a privilege, and I'm not talking about just the Thunderbirds. Every squadron commander that I've ever talked to is so proud to be where he or she is."

The colonel essentially wears two hats in his job, one as com-

• SEE MCSPADDEN PAGE 7

"What a dream come true, to come back to your

hometown and be commander of the Thunderbirds.

I can't wait. I really miss the panhandle of Florida

and Panama City, the people are so great."

#### ● FROM MCSPADDEN PAGE 6

mander of a 120-person unit and the other as leader of the demonstration team

The Thunderbird mission is to present aerial demonstrations and show off the capabilities of the modern Air Force, according to the Thunderbird commander.

"In essence we go on the road, 200 days a year, to represent 360,000 men and women that make up the world's most dominant air and space force," Colonel McSpadden said. This year is particularly special to the team as they celebrate 50 years of bringing the Air Force to the American public. To commemorate this, the team's schedule includes a 20-percent boost in shows. They're scheduled to hit 49 cities and 80 air shows.

The colonel knows he and his team have big shoes to fill when reflecting on their heritage and tradition of excellence. He talked about certain characteristics that make the Thunderbird assignment much like other assignments, yet nothing like others.

"If you look around our squadron (at Nellis AFB, Nev.), you'll find we're big on attention to detail. We polish places on our jets that aren't normally polished," Colonel McSpadden said. "But it's a direct reflection of the kind of attention to detail airmen across the Air Force are doing every day. Right now there's a group of Air Force people changing a hydraulic pump on an F-15

form before a familiar crowd is Capt. Chris Stricklin, opposing solo, and Chief Master Sgt. Phil Shatsar who leads the show line.

"It's a reflection of the talent Tyndall has," Colonel McSpadden said. Team Tyndall has been represented on the Thunderbirds for seven years running.

The Thunderbird leader says that the precision flying is the same flying funda-

m e n t a l s taught to all fighter pilots, the team just takes them to a different level. The real work is performing for your peers.

"The hard-

somewhere in the desert, fighting blowest thing to do is made ing heat and sand; that's the kind of proud, the people

USAF Thunderbirds commander

Lt. Col. Richard McSpadden

Colonel McSpadden isn't the only former member of Team Tyndall on the Thunderbirds team. Also returning to per-

work, teamwork we represent to the

public for them."

est thing to do is make our own Air Force proud, the people we represent, we feel they deserve perfection," Colonel McSpadden said. "When we make them proud, when they say they were proud to be in the Air Force today ... that's the best compliment we can get."

For Colonel McSpadden, this is the second year of a two-year tour, and how better to kick it off than with a hometown crowd.

"It's a great feeling," the colonel said.
"What a dream come true, to come back
to your hometown and be commander
of the Thunderbirds. I can't wait. I really miss the panhandle of Florida and
Panama City, the people are so great."

So what happens when this assignment is over?

"I'll move on, hopefully be promoted to colonel, and see what else I can do," Colonel McSpadden said. "Someone asked me about legacies once. Ours is to live up to the standard of excellence that's been established on this team for 50 years. When you're on this team for a few years, the patch is on loan to you. You've got to live up to that standard and somehow make it a little better place than when you arrived ... then move on."

"Richard is a great American," Dr. McSpadden said. "[He's] the kind of person you'd love to know. If there's a war, you'd want this incredible Air Force pilot in the cockpit."

Page 8 March 21, 2003

#### Saturday and Sunday

8 a.m. Gates Open National Anthem/four-ship flyby (F-15)

Unlimited Airshow

Korean War demo (F-86 & MIG 17)

Jet Truck "Flash Fire"

Four-ship flyby (T-6)

T-6 Heritage flight

T-6 Military demo

World War II demo (P-51 & Mitsubishi

Zero)

Heritage flight (P-51, F-86, F-15)

Nicholay Timofeev (SU-26)

QF-4 fly by

F-14 demo

Yak-9, Yak-3 demo

F-15 demo

Jet Truck "Flash Fire"

**Unlimited Airshow** 

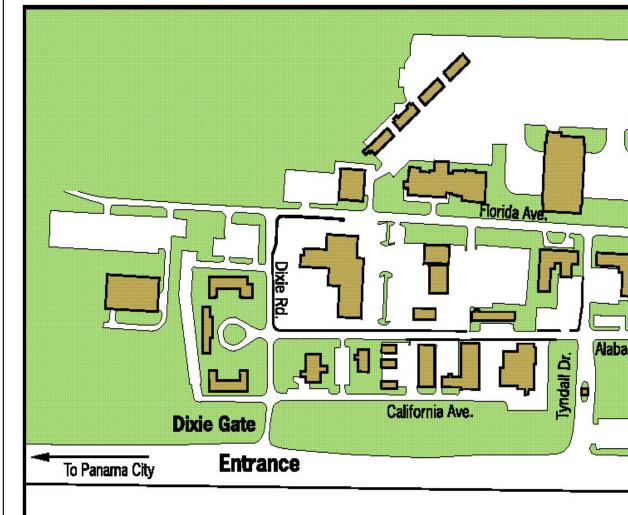
Thunderbirds ceremony

Thunderbirds demo

5 p.m. Gates Close

# Gulf Coast Salute 2003





#### **General Information**

#### **Medical Information**

- ☐ A tent staffed by medical personnel, will be setup near show center to provide first aid and water to air show participants.
- ☐ The health and wellness center will have a booth in Hangar 4 with health information and sunscreen.
- ☐ An ambulance will be on-site to handle medical emergencies.

#### **Kids Hangar Activities**

- ☐ Obstacle course
- ☐ Slide and stepping stones
- ☐ Fingerprinting (Bay County D.A.R.E.)
- ☐ Fast-pitch softball toss
- ☐ Girl Scout/Boy Scout crafts
- ☐ Home Depot model airplane and helicopter building booth

# Tyndall opens gates for

2ND LT. ALBERT BOSCO

325th Fighter Wing public affairs

What could be more fun than Panama City during spring break? Tyndall Air Force Base's Gulf Coast Salute 2003, scheduled for Saturday and Sunday, of course.

This year's air show promises action and excitement for the whole family with the United States Air Force's Aerial Demonstration Team, the Thunderbirds, filling Tyndall's skies with breathtaking aerobatics.

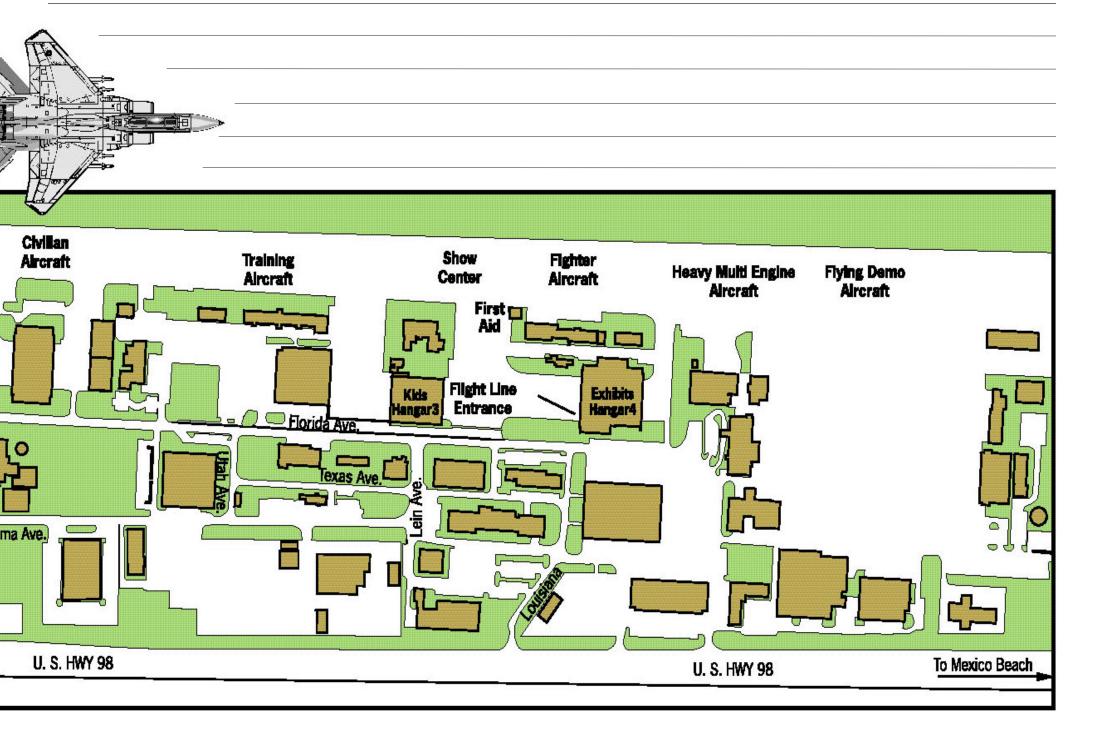
"We have an action-packed weekend lined up for people of all ages," said Maj. John Melloy, Gulf Coast Salute 2003 chairman.

Joining the Thunderbirds in the air show lineup will be several demonstrations by modern military aircraft such as the F-15 Eagle, F-14 Tomcat as

well as various vintage war-birds such as the T-6 Texan, P-51 Mustang, Japanese Zero, and F-86 Sabre

Other aerial performances scheduled for the air show include a mock Korean War engagement between an F-86 Sabre and a MiG-17 and a mock World War II engagement between a P-51 Mustang and Japanese Zero.

"The Gulf Coast Salute is a great opportunity to highlight the Air Force, educate the community and maybe even spark the interest of a few future airmen," said Brig. Gen. Larry New, 325th Fighter Wing commander. "While all of the billboards and newspapers tout the Thunderbirds as the featured act, I would argue that the real highlight of the weekend is the men and women of our armed forces."



# **Gulf Coast Salute 2003**

While there will be many aerial demonstrations taking place, there will be numerous ground displays and attractions for young and old alike. Some attractions include the U.S. Air Force "Cross Into The Blue" tour, which includes several simulators, a state-of-the-art movie theater, interactive kiosks and an F-16 that people can sit in.

Aircraft currently slated to be on static display include the QF-4, F-15, F-16, F-18, T-38, E-8 JSTARS, KC-135 and B-1 as well as aircraft from foreign countries including the British Tornado, Soviet-built MiG-23 and MiG-29. There will also be a performance by Flash Fire, the world's fastest jet-powered pickup truck.

An entire hangar is being dedicated to free events and activities for kids including pedal planes, face painting, moon walks and an F/A-22 display booth.

Additionally, there will be several vendors selling food and drink, as well as other concession items

As always, the annual show offers free admission and parking, and shuttle bus transportation will be provided to the flightline show area. However, security will be stressed and base officials remind attendees that no pets, weapons, glass bottles or containers will be allowed.

"Just have the mindset you would have if you were to board an airliner," Major Melloy said. "Those items that you are prohibited from taking on a commercial airliner will not be allowed on base."

For more information on activities and events, visit the official Web site at <a href="https://www.gulfcoastsalute.homestead.com">www.gulfcoastsalute.homestead.com</a> or call 283-8579

#### **Security/Safety information**

As you plan your visit for this year's Gulf Coast Salute, please keep the following in mind:

Don't bring backpacks, large coolers or unnecessary items

Don't bring weapons of any sort, even pocketknives

Don't consume alcoholic beverages and drive

Don't smoke around aircraft due to the jet fuel they carry

Don't throw trash on the ground because those objects can cause damage to jet intakes

Don't go into unauthorized areas

Page 10 March 21, 2003

## F/A-22 Raptor: redefining capabilities

SENIOR MASTER SGT. ROB FULLER 325th Fighter Wing public affairs

"Turning on a dime" brings to mind images of a split-second change of direction. Seem easy? Imagine doing that in a jet hurling through the sky. That's the F/A-22 Raptor.

The F/A-22 design, with its stealth, supercruise and integrated avionics, provides a high degree of assurance that a "dog-fight" will not be the typical experience for combat air force pilots. If close air-toair combat ever becomes necessary, other fighters don't stand a chance because of the Raptor's enhanced maneuverability.

"The preferred solution is first look, first shot, first kill," said Jeff Harris, Lockheed Martin lead engineer for flight control law decision and analysis, "but from a flying-quality perspective, we design the F/A-22 to be a lethal fighter even close-in, and give pilots maximum maneuverability."

The key to the F/A-22 Raptor's ability to maneuver better than conventional fighters is a system called thrust vectoring. Thrust vectoring is controlled by the pilot through the flight controls and gets the F/A-22 quickly from one maneuver to another. The vectoring nozzles on the two Pratt & Whitney F119 engines are controlled by the same flight control system that operates the horizontal tails, rudders and wing surfaces.

"The large control sur-

faces and the thrust vector-

ing capability of the aircraft

give us maneuverability and

control in areas where other

**JEFF HARRIS** 

Lockheed Martin

aircraft don't dare go."

the nose wherever he wants a much larger envelope, all the way to zero air speed," Mr. Harris said. "Thrust vectoring harnesses the power from the rear of the jet by using the

thrust vectoring nozzles (on the engines) and opens the envelope where other fighters would stall," Mr. Harris said.



The F/A-22's thrust vectoring allows it to open the envelope where other fighters would stall. The F/A-22 is scheduled to arrive at Tyndall AFB late this summer.

For the most part, the enhanced maneuverability features of the F/A-22 are transparent to the pilot. The aircraft controls are designed much like any conventional fighter with the thrust vectoring nozzles factored in for additional maneuver capability.

"The most obvious (difference from other jets) is the slow speed, high angle of attack region where the F/A-22 is still completely controllable while an F-16 Fighting Falcon or F-15 Eagle is completely uncontrollable," said Bret Luedke, F/A-22 chief test pilot at the Combined Test "It's the ability for a pilot to point Force, Edwards Air Force Base, Ca-

> lif. Mr. Luedke has been a test pilot for 13 years and has more than 150 hours in the F/A-22.

"The large control surfaces and the thrust vectoring capability of the aircraft give us maneuverability and control in

areas where other aircraft don't dare go," Mr. Luedke said. "It's kind of like comparing the capabilities of a Formula 1 race car with those of a VW

van while driving on a road race

"Thrust vectoring maneuverability, once reserved only for test pilots, will now be available to the combat air forces," Mr. Harris said. "This feature has been used in other developmental programs, but it's the first time it's been incorporated into production design." Combined with the other unique design elements of the F/A-22 – stealth, supercruise and integrated avionics - it transforms air superiority into air dominance.

"These characteristics will allow the F/A-22 to enable several transformational warfighting capabilities – a true 24-hour stealth capability – enabling other U.S. military and coalition forces, and a network-centric capability to disseminate information across multiple lesser-capable assets," Mr. Luedke said. "From the pilot's perspective, they will give the Raptor pilots the element of surprise and allow them to pick and choose the fights with significant tactical advantage."

After all, pilots are no different than anyone else. No one wants to be in a knife fight. But if the fight is inevitable, it's better to be wielding a sword than a penknife.

#### • From AIR SHOW Page 2

craft and other special ground displays. Other demonstration teams include: the F-15C, P-51 and the YAK Russian Warbird demonstration team, to name a few.

Aircraft slated to be on static display include the F-16, B-1, MiG-23,

MiG-29, C-130, Tyndall's primary aircraft, the F-15C and others.

This year's event truly showcases the technology of today and yesteryear. Also, an entire hangar is dedicated to free events and activities for children.

As you enjoy the day's events,

you'll see many of our airmen and soldiers in uniform. Use this opportunity to ask questions and get to know the professionals charged with our nation's defense. I know you'll walk away impressed and assured that our nation is in capable hands. Have fun and enjoy the open house and air show!

# Celebrating 100 years of powered flight

**1903** Wright Brothers - First powered, sustained, controlled flight

**1915** Fokker E-1 - Birth of aerial combat

**1921** First coast-to-coast airmail flight (San Francisco to New York City)

**1924** Douglas World Cruiser - First around-the-world flight

**1927** Charles Lindbergh - First solo flight across the Atlantic Ocean

**1932** Amelia Earhart - First woman to fly solo across the Atlantic Ocean

**1939** Heinkel He-178 - First turbojet aircraft **1947** Chuck Yeager - Piloted first aircraft to break the sound barrier (Bell X-1)

**1961** Alan B. Sheppard, Jr. - First American in space

**1965** Lockheed SR-71 - Set speed and altitude records of over 2,000 miles per hour and more than 85,000 feet above Earth's surface

**1967** North American X-15 - Set speed record of over 4,534 miles per hour

**1973** Skylab - First United States space station

1981 First flight of U.S. space shuttle

**1983** Guion S. Bluford, Jr. - First African American in space

**1983** Sally Ride - First U.S. woman astronaut **1998** John Glenn - Oldest American to fly in space

**2003** Lockheed/Martin F/A-22 scheduled to arrive at Tyndall AFB late summer

Page 12 March 21, 2003

## Preparation, planning key to enjoying this year's air show

house and air show will be one of the best ever. There will be World War II-era warbirds, static displays and, of course, the crowd-pleasing U.S. Air Force Thunderbirds. It should be a day full of fun and excitement for the entire family.

Before climbing in your vehicle and driving out to the air show, there are a few guidelines you should keep in mind to help you maximize your enjoyment and minimize any problems.

#### **Preparation**

Wear clothing that is comfortable and appropriate for the weather. Pay special attention to your footwear. After all, you will be on your feet most of the day doing a lot of walking and, if you plan on climbing aboard any of the aircraft displays, tennis shoes will provide better protection to your feet than sandals or flip-flops.

Think sun protection. There is very little shade available on the flightline where the air show will take place. Wearing a baseball cap or summer hat to help shade the face is a good idea. Apply sunscreen throughout the day. Consider carrying an

This year's Gulf Coast Salute open umbrella as a substitute parasol to provide your own shade. Just be courteous to others around you if you do raise an

> A full day in the Florida sun can mean dehydration unless plenty of fluids are consumed. There will be concession stands

> > in the air show area selling both food and beverages. People are asked to refrain from bringing backpacks and small coolers for security reasons as everything will be subject to search.

A lightweight beach chair or blanket might come in handy once you have seen all the aircraft static displays and are ready to sit, rest and watch the aerial demonstra-

tions, including the Thunderbirds.

#### **Travel**

Do

Do wear comfortable clothing

Do wear sunscreen and

Do consider using an

umbrella since there is little

Do wear seat belts as the base

enforces the use of seat belts

Do obey all posted speed

and shoes

reapply regularly

Do drink plenty of fluids

shade on the flightline

Do enjoy the air show

limits on base

As you load up your vehicle, ensure evervone has a seat belt and uses it. The base enforces the use of seat belts. Also, do not load people, children or adults, into the bed of pickup trucks. It doesn't matter whether the truck bed is enclosed or not - what matters is that there are no proper seats with seat belts for them in the pickup-truck bed.

#### Air Show

which has many hazards. Please do not stray into unauthorized areas - they will be posted with warning signs. This is for your own safety and protection.

Use caution when walking around and under the static display aircraft. There are many projections hanging under the aircraft at just the right height to cut your forehead. If someone you know is surprised and gets nicked, there is a first aid station on the flight line.

Smoking is prohibited near the aircraft

due to the jet fuel they carry. Please respect this rule for the safety of others.

We ask that you not climb on any elevated structures, including walls. Most of the walls enclose hazards we are trying to protect you from, and we don't want anyone injured from a fall.

Most of the aerial demonstrations are by aircraft powered by jet engines. Jet engines can be damaged by ingesting foreign objects such as paper cups, soda cans, etc. We don't want to cut short any The air show is held on the flight line, of our demonstrations due to foreign-ob-

> ject damage, so please use the trash receptacles throughout the air show area.

Alcoholic beverages will be available at some of the beverage booths. Don't spoil your day or anyone else's by drinking excessively at the air show. Also, please don't drink and drive. Have a plan for a designated driver if you wish to drink alcoholic beverages.

Finally, let's watch out for our small children. There will be large crowds at the air show, and small children easily become dis-

oriented and lost. We ask that everyone watch out of the children, and if you find a lost child, please bring them to the "Lost Parents" booth.

(Courtesy of the 325th Fighter Wing safety office)

#### Don't

Don't bring backpacks, large coolers or unnecessary items

Don't bring weapons of any sort, even pocketknives

Don't consume alcoholic beverages and drive

Don't smoke around aircraft due to the jet fuel they carry

Don't throw trash on the ground because those objects can cause damage to jet intakes

Don't go into unauthorized areas

All air show attendees are subject to search

# Lisa Carrol

#### Turning on a dime

An F-15 Eagle demonstrates its turning capabilities with full power applied.

# 'Cross Into The Blue' tour brings technology, education to GCS 2003

It's the chance of a lifetime for those who might have dreamed about the thrill of standing next to an actual F-16 Fighting Falcon, let alone sitting in one, interacting first-hand with Air Force technology.

Better yet, imagine actually experiencing 'spatial disorientation' similar to that which pilots may encounter.

The U.S. Air Force – through its innovative "Cross Into The Blue" tour is taking its recruiting efforts on the road. The tour will be stopping in 40 cities this year in order to stage a dynamic, grassroots extension that provides today's high school and college students, as well as the general public, a unique vehicle to get up close and personal with

what is exclusive to the U.S. Air Force.

Some events scheduled for Tyndall's "Gulf Coast Salute" include an interactive air-to-air refueling simulator in which visitors can try their hand at refueling a fighter in mid-flight, and an interactive special operations jump simulator in which visitors can experience the thrill of skydiving without leaving the ground or feeling the gforces.

Other interactive exhibits include the extreme equilibrium simulator, satellite systems display, an F-16



Courtesy photo

Tyndall visitors will get a chance to experience spatial disorientation similar to that felt by pilots as well as experience other unique exhibits during this year's Gulf Coast Salute.

Fighting Falcon and various interactive kiosks.

For a preview of scheduled events, or for additional information, visit fairs)

www.airforce.com and select the special events link.

(Compiled by 325th Fighter Wing public affairs)

Page 14 March 21, 2003



Courtesy photo

#### **Bombs away**

A B-1B Lancer drops cluster munitions. The B-1B uses radar and inertial navigation equipment enabling aircrews to globally navigate, update mission profiles and target coordinates in-flight, and precision bomb without the need for ground-based navigation aids. The B-1 will be one of many static display aircraft at this year's Gulf Coast Salute.

